



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket No.: **ISPH-0768**

Inventors: **Baker et al.**

Serial No.: **10/652,795**

Filing Date: **August 29, 2003**

Examiner: **Not Yet Assigned**

Group Art Unit: **Not Yet Assigned**

Title: **Antisense Oligonucleotide Modulation of
Tumor Necrosis Factor- α (TNF- α)
Expression**

I, Jane Massey Licata, Registration No. 32,257,
certify that this correspondence is being deposited
with the U.S. Postal Service as First Class mail in
an envelope addressed to the Commissioner for Patents
P.O. Box 1450, Alexandria, VA 22313-1450

On this date: January 14, 2004

Jane Massey Licata
Jane Massey Licata, Registration No. 32,257

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 C.F.R. §1.56 and in accordance with 37 C.F.R.
§§1.97-1.98, information relating to the above-identified
application is hereby disclosed. Inclusion of information in
this statement is not to be construed as an admission that this
information is material as that term is defined in 37 C.F.R.
§1.56(b).

(XX) In accordance with §1.97(b), since this Information
Disclosure Statement is being filed either within three
months of the filing date of the above-identified

application, within three months of the date of entry into the national stage of the above identified application as set forth in §1.491, or before the mailing date of a first Office Action on the merits of the above-identified application, no additional fee is required.

- () In accordance with §1.97(c), this Information Disclosure Statement is being filed after the period set forth in §1.97(b) above but before the mailing date of either a Final Action under §1.113 or a Notice of Allowance under §1.311, therefore:
 - () Certification in Accordance with §1.97(e) is attached hereto; or
 - () The fee of \$180.00 as set forth in §1.17(p) is attached.
- () In accordance with §1.97(d), this Information Disclosure Statement is being filed after the mailing date of either a Final Action under §1.113 or a Notice of Allowance under §1.311 but before the payment of the Issue Fee, therefore included are: Certification in Accordance with §1.97(e); Petition Requesting Consideration of the Information Disclosure Statement; and the fee of \$130.00 as set forth in §1.17(I)(1).
- () Copies of each of the references listed on the attached Form PTO-1449 (modified) are enclosed herewith.

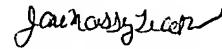
(xx) In accordance with §1.98(d), copies of some or all of the references listed on the attached Form PTO-1449 (modified) are not enclosed herewith because they were previously submitted to the U.S. Patent and Trademark Office in prior application Serial No. 09/166,186, filed October 5, 1998, Serial No. 09/313,932, filed May 18, 1999 and Serial No. 09/824,322, filed April 2, 2001 for which a claim for priority under 35 U.S.C. §120 has been made in the instant application.

Please charge any deficiency or credit any overpayment to Deposit Account No. 50-1619. This form is submitted in duplicate.

() The relevance of the listed references in a foreign language is as stated in the specification at pages @@.

(xx) All listed references are in the English language.

Respectfully submitted,



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Date: January 14, 2004

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JAN 16 2004

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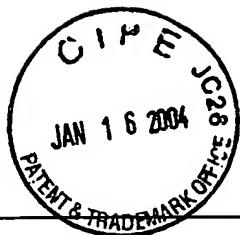
Form PTO-1449 Modified		Docket No. ISPH-0768	Serial No. 10/652,795
List of Patents and Publications Cited by Applicant (Use several sheets if necessary)		Applicant Baker et al.	
U.S. Department of Commerce		Filing Date August 29, 2003	Group Not Yet Assigned

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

AA	Aggarwal et al., "Triple Helix-forming Oligodeoxyribonucleotides Targeted to the Human Tumor Necrosis Factor (TNF) Gene Inhibit TNF Production and Block the TNF-dependent Growth of Human Glioblastoma Tumor Cells ¹ ", 1996, Cancer Res., 56, 5156-5164
AB	dHellencourt, "Inhibition of human TNF α and LT in cell-free extracts and in cell culture by antisense oligonucleotides", 1996, Biochim. Biophys. Acta, 1317, 168-174
AC	Hartmann, "Oligodeoxynucleotides Enhance Lipopolysaccharide-Stimulated Synthesis of Tumor Necrosis Factor: Dependence on Phosphorothioate Modification and Reversal by Heparin", 1996, Mol. Med., 2, 429-438
AD	Hartmann, "Specific Suppression of Human Tumor Necrosis Factor- α Synthesis by Antisense Oligodeoxynucleotides", 1996, Antisense Nucleic Acid Drug Devel., 6, 291-299
AE	Rojanasakul, "Antisense Inhibition of Silica-induced Tumor Necrosis Factor in Alveolar macrophages", 1997, J. Biol. Chem., 272, 3910-3914
AF	Taylor et al., "In Vitro Efficacy of Morpholino-modified Antisense Oligomers Directed against Tumor Necrosis Factor- α mRNA", 1998, Antisense Nucleic Acid Drug Devel., 8, 199-205
AG	Taylor et al., "Effect of TNF- α Antisense Oligomers on Cytokine Production by Primary Murine Alveolar macrophages", 1996, J. Biol. Chem., 271, 17445-17452
AH	Tu et al., "Tetranucleotide GGGA Motif in Primary RNA Transcripts", 1998, J. Biol. Chem., 273, 25125-25131

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Form PTO-1449 Modified		Docket No. ISPH-0768	Serial No. 10/652,795
List of Patents and Publications Cited by Applicant (Use several sheets if necessary)		Applicant Baker et al.	
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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	BA	Henry et al., "Toxicological and pharmacokinetic properties of chemically modified antisense oligonucleotide inhibitors of PKC- α and C-raf kinase", Anti-Cancer Drug Design 1997 12:407-420
	BB	Kern et al., "The Expression of Tumor Necrosis Factor in Human Adipose Tissue", J. Clin. Invest 1995 95:2111-2119
	BC	Milner et al., "Selecting effective antisense reagents on combinatorial oligonucleotide arrays", Nature Biotechnology 1997 15:537-542
	BD	Sanghvi et al., "Concept, Discovery and Development of MMI Linkage: Story of A Novel Linkage for Antisense Constructs", Nucleosides & Nucleotides 1997 16(7-9):907-916
	BE	Stull et al., "An In Vitro Messenger RNA Binding Assay as to Tool for Identifying Hybridization-Competent Antisense Oligonucleotides", Antisense & Nucleic Acid Drug Development 1996 6:221-228

EXAMINER	DATE CONSIDERED
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Form PTO-1449 Modified List of Patents and Publications Cited by Applicant (Use several sheets if necessary) U.S. Department of Commerce	Docket No. ISPH-0768	Serial No. 10/652,795
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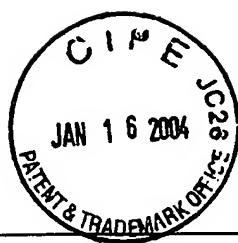
U. S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS

Examiner Initial	Document No.	Date	Country	Translation	
				YES	NO
AB	WO 93/09813	5-27-93	PCT	X	
AC	0 414 607 B1	8-22-90	PCT		X
AD	WO 95/33493	12-14-95	PCT	X	
AE	WO 95/00103	1-5-95	PCT	X	
AF	WO 95/32628	12-7-95	PCT	X	

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Examiner Initial		Document No.	Date	Country	Translation	
					YES	NO
	AG	WO 94/10301	5-11-94	PCT	X	
	AH	WO 95/23225	8-31-95	PCT	X	
	AI	WO 96/40162	12-19-96	PCT	X	
	AJ	WO 99/59547	11-25-99	PCT	X	

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DATE CONSIDERED